

# FERROTAN

MIOX MC polyurethane coating  
(TU №2312-036-12288779-2003)



## PRODUCT DESCRIPTION:

FERROTAN is a one-component, moisture-cured polyurethane coating with micaceous iron oxide as a barrier pigment.

## RECOMMENDED USE:

As an anticorrosive protection of structural steel and concrete in atmospheric conditions of all climatic regions, types of atmosphere, and category of location according to GOST 15150-69. FERROTAN has good resistance to sea and fresh water; salt solutions, acid and alkali solutions with pH 2-12; petrol and related products.

It is applied as an intermediate or finish (if UV-radiation is not intensive) in coating systems or as a single coating.

It is recommended to be applied in the coating systems with:

- zinc-rich primers - ZINOTAN (TU 2312-017-12288779-2003) and ZVES (TU 2312-004-12288779-99);
- penetrating primer FERROTAN-PRO (TU 2312-042-12288779-2004);
- topcoats - ALUMOTAN (TU 2312-018-12288779-99), POLYTON-UR (TU 2312-029-12288779-2002), POLYTON-UR(UV) (TU 2312-033-12288779-2002), clear-coat PULAK (TU 2311-035-12288779-2002), and other polyurethane and vinyl topcoats.

## CERTIFICATES/APPROVALS:

State Registration Certificate No. RU.66.01.40.015.E.000072.03.11/ 17 March, 2011. GOST 9.401-91, GOST 31384-2008.

**Oil & Gas:** Register of TR and TT AK Transneft OJSC; Register of Gazprom OJSC, Register and Technological Instruction of NK-Rosneft OJSC (P2-05 C-028 P-002 T-001); STO 03-196-2006 ANK Bashneft.

Accredited laboratory conclusions of NII LKP with OMZ «Victoriya»; NIIZHB LLC, Gi-protumenneftegaz OJSC, BashNIPIneft LLC, Gazprom VNIIGAZ LLC, RusHydro JSC, IPEE RAN A.N. Severtsov Institute of Ecology and Evolution of the Russian Academy of Sciences (Research and Test Center in Severomorsk and Sochi, Russia; Nha Trang, Vietnam).

## TECHNICAL DATA:

	Coating
Colors/Finish	dark-brown with metallic shining
Dry film thickness per coat (typical)	80 - 100 microns
Adhesion, GOST 15140-78	1 grade, not more
Impact resistance, GOST 47-65-73	50 cm, not less
Bend test (cylindrical mandrel), GOST R 52740-2007	2 mm, not more
Resistance to dry heat	up to 150 °C
Coating class, GOST 9.032-74	IV
	Paint
Specific gravity	1.5 – 1.7 g/ml
Non-volatile matter content (Wt)	78.0 – 83.0 %
Viscosity	thixotropic
Calculated coverage	225 - 280 g/m <sup>2</sup> (80 - 100 microns)
Drying time up to degree No 3 GOST 19007-73 ("touch-dry") at (23±2) °C and (65±5) % RH	8 h, not more

## SURFACE PREPARATION:

The primer surface should be dry and free from all contamination.

If FERROTAN is applied as a single coating it is necessary to:

- Remove oil and grease to achieve degree №2, GOST 9.402-2004;
- Blast slag, rust and old coating to achieve degree №2, GOST 9.402-2004 (Sa 2 1/2 or Sa 2, ISO 8501-1:2007). For mild exposures, power tool clean St3/St2 is acceptable;
- Clean surface carefully from abrasive and dust.

## APPLICATION:

- Stir thoroughly;
- Add recommended thinner to achieve workable consistency if it is necessary.

FERROTAN is recommended to be applied for shop and field painting at the temperature from -15 °C to +40°C and from 30 to 98% RH (from 40% to 98% is the best). When air humidity increases, drying time of the coating decreases.

When FERROTAN is applied in field painting at relative humidity less than 30 % It is recommended to be used the accelerator for polyurethane coatings (TR 2359-047-12288779-2005) for decreasing drying time (in 2-4 times). Contact VMP GROUP for further advice.

Minimum recoating interval of primers by FERROTAN at (23±2) °C and (65±5) % RH for:

- ZINOTAN® is 4 h, not less;
- ZVES® is 6 h, not less;
- FERROTAN-PRO is 5 h, not less.

Every next coat of FERROTAN is recommended to be applied after drying of the previous coat up to «touch-dry».

Minimum recoating interval at (23±2) °C and (65±5) % RH to topcoat is 24 h.

FERROTAN is sensitive to moisture. Keep the can tightly closed until use; avoid long contact with air.

The time of full cure at (20±2) °C is 7 days; the time of package and shipping of coated constructions is 24 ч.

### **Airless spray**

Recommended Thinner	SOLV-UR (TU 2319-032-12288779-2002) or Solvesso 100 up to 10 % by weight
Nozzle size	0.017 – 0.021" (0.43 – 0.53 mm)
Nozzle pressure	10 - 15 MPa (100-150 bar)

### **Conventional spray**

Recommended Thinner	SOLV-UR (TU 2319-032-12288779-2002) or Solvesso 100 up to 10 % by weight
Nozzle size	1.8 – 2.2 mm
Nozzle pressure	0.3 – 0.4 MPa (3 - 4 bar)

### **Brush / Roller**

Recommended Thinner	SOLV-UR (TU 2319-032-12288779-2002) or Solvesso 100 up to 10 % by weight
	SOLV-UR (TU 2319-032-12288779-2002) or Solvesso 100, P-4, 647

### **Equipment cleaner**

## STORAGE AND HANDLING

FERROTAN is packaged in cans by 15kg and 1.4 kg.

Store in dry, shaded conditions away from sources of heat, moisture and ignition, GOST 9980.5-2009.

Guaranteed shelf life in the manufacturer's package units is 6 months from the date of packaging.

## SAFETY PRECAUTIONS

FERROTAN has the fourth class of hazard, GOST 12.1.007-76. It is necessary to follow all local or national safety regulations.



**VMP RESEARCH & PRODUCTION HOLDING JOINT-STOCK COMPANY (VMP HOLDING)**  
105, Amundsen St., Ekaterinburg, 620016, Russia, tel./fax.: +7 343 267 94 31; 266 09 15;  
E-mail: [office@fmp.ru](mailto:office@fmp.ru);  
WEB: [www.coldzinc.ru](http://www.coldzinc.ru)  
**Moscow**, tel./fax.: +7(495) 955-12-64; 955-12-63; e-mail: [svx@fmp.ru](mailto:svx@fmp.ru)  
**St. Peterburg**, tel./fax.: +7(812) 449-48-00; e-mail: [spb@fmp.ru](mailto:spb@fmp.ru)  
**Voronezh**, tel.: +7(4732) 20-55-98; e-mail: [zamet@comch.ru](mailto:zamet@comch.ru)  
**Novosibirsk**, tel.: +7(383) 205-07-00; e-mail: [alex@stroy-nsk.ru](mailto:alex@stroy-nsk.ru)